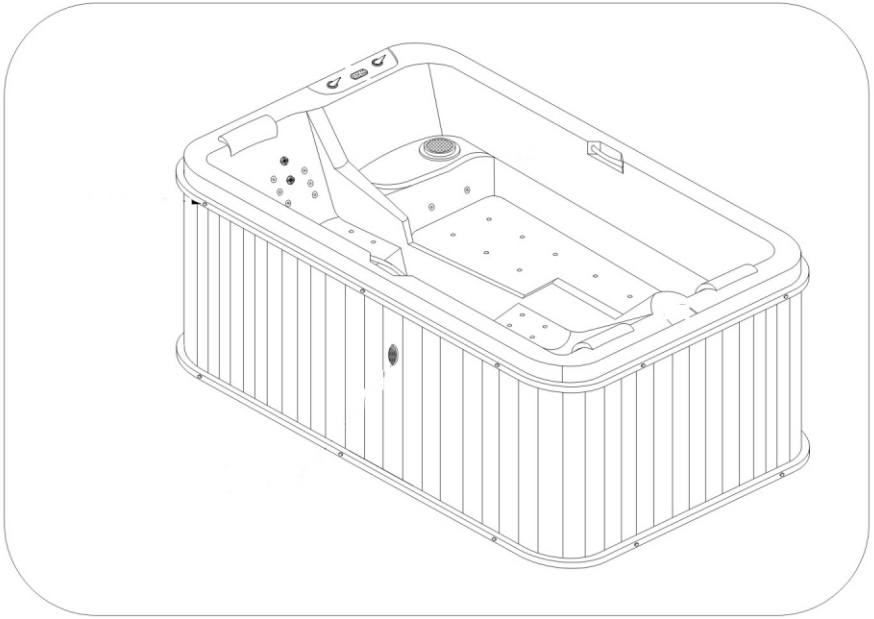
SPA

Use Instruction



MODEL: A616

ISO9001:2008 CE

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Symptom	Probable Cause	Solution
Underwater light failure	1. Low water level. 2. The connection to water level sensor loose or break off. 3. Improper wiring or bulb damaged.	1. Add water to normal level. 2. Check the wiring. 3. Making connections or change the bulb.
The radio shows no volume	1. Connection to speakers loose or break off. 2. Speakers damaged.	1. Check the wiring. 2. Change the speakers.
The radio is not clear	The aerial was not connected well or improper direction	Connect the aerial and adjust the aerial direction.
Feel tingle	Not grounded	Grounding

The above faults should be handled by qualified electrician.

Welcome to use our products. Do read the instructions in detail before you install and use it. Do not miss this user manual.

The Spa tubs of our company are well-found, convenient to install, simple to operate, which is your first choice for the household use, hotels etc. It is a unique and upscale bath facility, gathering the computer control, hydro massage and hydrotherapy for an integrate, which is made up of Hydro Massage System, Air Bubble Massage System, Filtering With Constant Temperature System and Ozone disinfection System etc. It adopts the intellectualized low-voltage circuit to control the high-voltage circuit system, including the Water Level Control, Temperature Control, Overload Protection, and Breaking Current Protection etc. Our Spa series have international safety standard approvals, such as ETL (UL), CE (EMC, LVD), KETI certifications and so on. It is absolutely a safe product.

The Hydro massage can speed the blood circulation, relax muscle, so as to eliminate fatigue, recover physical strength, renew energy and spirit, at the same time, it can extend the capillary, promote the circulation of lymphoid, in order to release yourself from tension. It is also helpful for you to loose weight. A healthy body can only be maintained by relaxation.

The positive effects of hydrotherapy are well known. You can add different kinds of medication and perfume to ease muscle aching, improve sleep, and recover from illness. Allowing the release of these physical burdens can leave the mind calmer and open to a more positive outlook. An appropriate hydrotherapy is very helpful for you to prevent yourself from aging. You need to consulate with a doctor for proper medication in hydrotherapy.

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SPA Trouble Shooting

The above faults should be handled by qualified electrician.

Symptom	Probable Cause	Solution
Spa system No electricity	1.Leakage circuit interrupter tripped or in OFF position. 2. Electrical cord or transformer cord not plugged in. 3. The Control box and Control panel not connected well. 4. The fuse in the control box was broken	1.Reset the Leakage circuit interrupter. 2. Plug in the electrical or transformer cord. 3. Connect the wires and fix the screws. 4. Change the fuse (1.25A).
Control panel failure	1. Power supply got interfered, programme was in disorder. 2. IC AT89C2051 damaged.	1.Cut off the power supply it, and restart. 2. Change the IC AT89C2051.
Spa not heating properly	1. Improper water level. 2. The connection with water level sensor loose or break. 3. Set improper heating temperature or time. 4. Overheating protection device tripped or heating element damaged. 5. The relay controlling the air blower damaged. 6. AT89C2051 damaged.	1. Add water to normal level. 2. Check the wiring. 3. Make sure the set temperature is higher than surrounding temperature, and the setting time is not ZERO. 4. Check the overheating protection device or heating elements. 5. Change the Relay controlling the heater. 6. Change the IC AT89C2051
No whirlpool	1. Low water level. 2. Connections to Water Level sensor are loose or break off. 3. The relay controlling the whirlpool pump damaged. 4. Whirlpool pump damaged.	1. Add water to normal level. 2. Check the wiring. 3. Change the relay controlling the whirlpool pump. 4. Change the new whirlpool pump.
Jet pressure not strong enough	1.Suction or discharge line partially blocked. 2. Dirty filter cartridge. 3. Spa jets improperly adjusted.	1. Check the whirlpool pump and remove the debris. 2. Clean the suction or filter cartridge. 3. Reset jets for desired output.
No air bubble	1. Low water level. 2. The connection with water level sensor loose or break. 3. The relay controlling the air blower damaged. 4. Air blower damaged.	1. Check the water level. 2. Check the wiring. 3. Replace the relay controlling the air blower. 4. Replace the air blower.

GENERAL MAINTENANCE

1. To prevent exposing to sunlight and dirty, cover the spa tub with its cover after use.

2. If you plan not to use the spa tub for a long term, please drain the water out and dry the spa tub to avoid water scale sticking to its surface.

3. Check the filter cartridge at least once a week to ensure the water filtering flow properly. It is very important to maintain your spa filter cartridge clean and free of dirty. A clean filter make the hydro massage system to function properly and also allows more efficient filtering. It is recommended clean the filter each 4 to 6 weeks; depending on the frequency you use the filtration function. If this is not done, the filter may be blocked and restrict water flow, which causes inadequate filtration.

4. CLEANING THE FILTER: Turn the filter lid counter-clockwise to remove it, and then take the filter element out. Turn and separate filter element pleats while spraying water to it. You may need to use "spa filter cleaning" solution for further cleaning in order to clean up mineral deposits and oils. Dry the filter element after cleaning. Use wet cloth to clean the wall of filter house. Then, put the filter element back to the house, revert the lid.

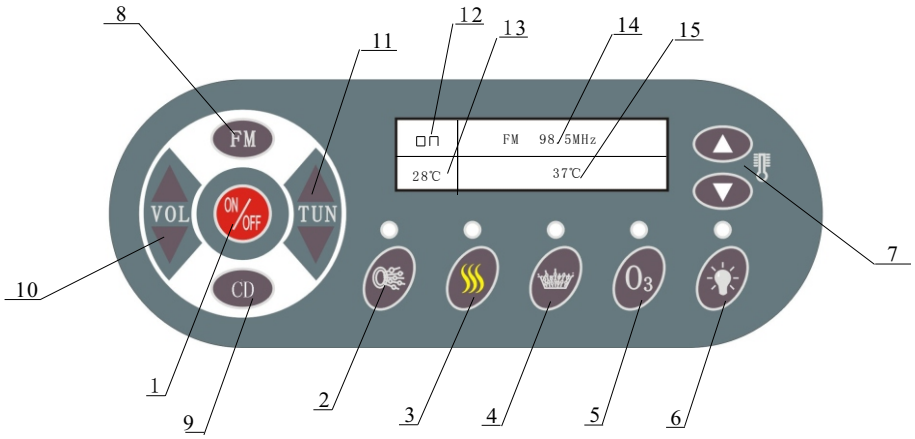
5. The lacquer of wooden skirt/cabinet is waterproof and rotproof. It is recommended renew the lacquer annually.

6. If there is scratch on spa tub surface, you can use #1500 or #2000 sand paper to polish it. Then fill it with toothpaste and polish it with soft cloth.

7. You can use common liquid scour or soft cloth for daily cleaning. Do not use liquid that contains ketone or chlorine to clean it. If there is glue on its surface, you can use a soft cloth with little gas to wipe it away.

OPERATION INSTRUCTION

Control Panel



Key Buttons

1. MASTER SWITCH
2. WHIRLPOOL SWITCH
3. THERMOSTAT SWITCH
4. AIR BUBBLE SWITCH
5. OZONIZER SWITCH
6. UNDERWATER LIGHT ON/OFF
7. CONSTANT TEMPERATURE ADJUSTMENT
8. FM RADIO ON/OFF
9. FM RADIO,CDSWITCH
10. VOLUME +/−
11. CD/RADIO CHANNEL+/−
12. WATER LEVEL STATUS DISPLAY
13. WATER TEMPERATURES DISPLAY
14. FM RADIO DISPLAY
15. PRESET TEMPERATURE

User Instructions:

Main features of this spa include: whirlpool massage, air bubbles, thermostat, filtering, ozone, FM radio, low temperature protection and underwater light. All functions can be available only after the Master Switch is on, and will stop automatically when the Master Switch is off (except low temperature protection). When the unit is plugged in, the red indicator will be on. Then water temperature, default temperature 37°C and water level condition can be seen on the controller display, which indicate the unit is ready for use.

1. Master Switch

Press the Master Switch

（button 1） and the red indicator light is on. The system is started and relevant information can be seen on the controller display. All functions are ready for use.

Low temperature protection: Although the motor and heater are off, when the water temperature is below 10°C, the heater starts automatically to avoid freezing. While the water temperature up to 13 °C, the system stops heating automatically.

2. Whirlpool Function

The motor is a two-speed pump

The whirlpool switch (button 2) on the control panel operates the pump and selected jes. Press (button 2)once to turn on the Pump(high speed), the jet stream comes from the tub side and bottom, creating whirlpool massage fanction.Press the (Button 2) again to change speeds, the whirlpool system works in low speed (for heating or filtrating).The third press,it stops.

9. Turn off the master switch in the controller before you remove the wooden skirt.

10. Don't use any electrical appliances when bathing in the spa, in case of getting an electric shock.

11. Don't use the spa immediately after strong exercise.

12. Don't open the electrical box or repair the spa by yourself. If it needs maintaining, please consult with a professional.

13. When using the spa, the water quality is very important for your health. The PH value is a measure of the relative acidity or alkalinity for the water, ranging from 1 to 14. Fresh water has a PH value of 7, which is neutral. If the PH value is higher than 7, it is alkaline; or else, it is acidity. The ideal PH values for your spa are between 7.2 and 7.8. Severe problems may be caused in case PH value is not maintained in this range. For example, PH>7.8, the dissolved minerals can be built up and clog the plumbing system and jets of the spa; PH<7.2, the water acidity will rot the metal accessories of the spa. Meantime, the sanitation agents in the water will not work effectively if the PH value is not properly maintained.

To maintain the proper acidity and alkalinity of PH, you should test the PH value regularly. To test the water, you could use a PH test kit the spa supply store. The PH value should be showed between 7.2 and 7.8. If the PH value is too low, add some alkaline additive (soda powder commonly); if PH value is too high, add some acidity reducer dose (Sodium bisulfate commonly).

Use Instruction

1. There is a thermostatic system in the spa. When the spa system is off and the water temperature is below 10℃, the thermostatic system starts automatically to heat the water up to 13℃, and then it stops automatically. This is to prevent the water from icing and to avoid the piping and the relative facilities being damage.

2. If the spa tub is not enough water or lack of water, you can't start the hydro massage and thermostat functions. This is a default program that to avoid the system being broken. The required water level must be where 5cm under the pillow.

3. You can adjust the diverter valve to focus hydro massage to specific area to enjoy strong or gentle hydro massage.

4. Every jet location is designed according to somatology, which can give you enjoyable hydro massage for whole body. Further more, you can adjust the volume of water flow and direction for the jets according to your requirement, to achieve the best hydro massage.

To avoid accidents, ensure that children cannot use this spa unless they are supervised at all times.

Don't allow long hair and other small objects get close to the backwater and filter guard when the hydro massage system starts. It is recommended wear a bathing cap if your hair is long.

7. Don't touch the check valve of air blower on the spa tub; it is very hot when air bubble function is working.

8. When the massage system is running, do not stop all the jets or block the jets at the same time, otherwise it will break the water pipes and electric components.

Note*: *If the Thermostatic system is working, You can't turn the whirlpool Function off until you turn off the Thermostatic Function.

When the whirlpool Function is on, the Filtration system is working at the same time.

3. Thermostatic Function

Press the Thermostat Switch (button 3) after starting the system and the corresponding indicator is on. The thermostat is working automatically according to the preset temperature. During this period, the system will self-check the preset temperature and the water will be heated accordingly. When the water temperature comes to the preset temperature, the heater will stop working automatically. And when the actual water temperature is 3°C lower, the heater will starts working again.

The water being heated is recycled consistently. Users can preset the constant temperature on their preference. The adjustable range temperature is 10°C - 45°C while the default temperature is 37°C. The preset temperature indicates on the control panel display. Press (button 3) again to shut it down.

Notice:

Considering some users sometimes will keep the spa outside running all the time with cover so that they could use the spa at any time. We advise all the users only start the master switch first and then press the Thermostat Switch (button 3) once to keep the spa running at a low speed heating according to your preset temperature. When the water temperature comes to your preset temperature, the heater and pump will stop working at the same time, and when the actual water temperature becomes 3°C lower, the heater and the pump will start to work automatically again.

(If you press the Whirlpool Switch (button 2) firstly, and then press the Thermostat Switch (button 3), it means the spa running at a high speed heating. So when the water comes to the preset temperature, only the heater could stop automatically, but the pump will still keep working. Because the spa is covered with cover and at the bottom with an EP seal which makes the spa could not leak any heat, and the running pump in a long time, even several days will produce much heat to make the water become warmer and warmer. Sometimes the water temperature would be higher than the preset temperature, even comes to the Max.temperature showed on the panel. So when you don't use the spa and want to keep spa running all the time we suggest all the user should use the low speed heating to run the spa, it is very important!!!!)

4. Filtration Function

The Filtration Function works while the whirlpool pump is working. In the same way, the Filtration Function is on/off when the whirlpool Function or Thermostatic Function is on/off.

5. Air Bubble Function

Press Air bubble Switch (button 4) when the system is running and the indicator light is on. Air bubbles come out from the bottom at a certain speed, forming manifold air columns. Press Air Pump Switch again to shut it down.

6. Ozone Sterilization

Press Ozone Switch (button 5), the indicator is on and the Ozonizer will generate Ozone and infuse the Ozone to sterilize the water in the spa. Press the switch again to turn it off. We advice user to operate ozone when massage and heating.

7. Underwater light

Press the Underwater Light Switch (button 6)to turn the light on. Press it again to turn it off.

8. Temperature Setting

User can adjust the temperature-setting Switch (button 7) to preset the constant temperature. Temperature will be up or down 1℃ with short press while change continuously by long press. The adjustable temperature range is 10℃-45℃.

9. FM Radio

Press the FM Radio ON/OFF Switch

(button 8), the FM Radio

Electrical Parameter For Spa tub:

Rated Voltage:	AC110V/60Hz	☐
	AC220-240V/50Hz	☐
	AC380V/50Hz	☐
Whirlpool Pump:	_____	KW
Thermostatic system:	_____	KW
Air Blower:	_____	KW
Other:	_____	KW
Rated Power:	_____	KW

1.In order to accord with the requirement of Criterion: EN61000-3-11 and EN6100-3-4, the Spa tub connected Electrical Wire Netting must adapt to the following requirements:

The Rsce of Electrical Wire Netting should be not less than 33, the Zsys of Electrified Wire Netting shouldn't be over 0.34, the ratio of inductive to resistive components of Zsys given by Xsys/Rsys shall be within the range 0.5-0.75.The part of the connected Electrical Wire Netting must be connected into a Ground-Fault Circuit Interrupter with a rated tripping current not exceeding 30 mA.

2.Parts of the unconnected electrical must be incorporated in the fixed wiring according to the wiring rules.

2. Connect drainage: Use a 1.5 inches diameter pipe to connect the spa drainage outlet.

3. Connect water supply: You can simply fill water for the spa tub from the top with a garden hose. It is also an option to connect water supply from hot/cold water inlets at the bottom of spa shell.

Notice: To ensure normal running of the spa functions and the safety of its circuit system, it is very important to be installed by a qualified electrician. You should choose proper power cables, referring to following data:

Copper lead diameter (mm^2)	Safety-load volume (A)
2. 5	20
4	25
6	30
8	40
14	55

function starts, and the corresponding frequency shows on (14) on the control panel. Press FM (button 8) again to turn it off. When the FM radio is on, user can select favorite channel through adjusting the frequency. The TUN (button 11) available frequency range is 87.5MHz-108MHz.

User can adjust the volume through adjusting the VOL Volume +/− Switch VOL (button 10).

10. CD Function

When the FM Radio is on, press CD Switch CD (button 9), then user can enjoy the CD disc and adjust the volume through adjusting the Volume +/− switch VOL (button 10) .

11. Control panel display

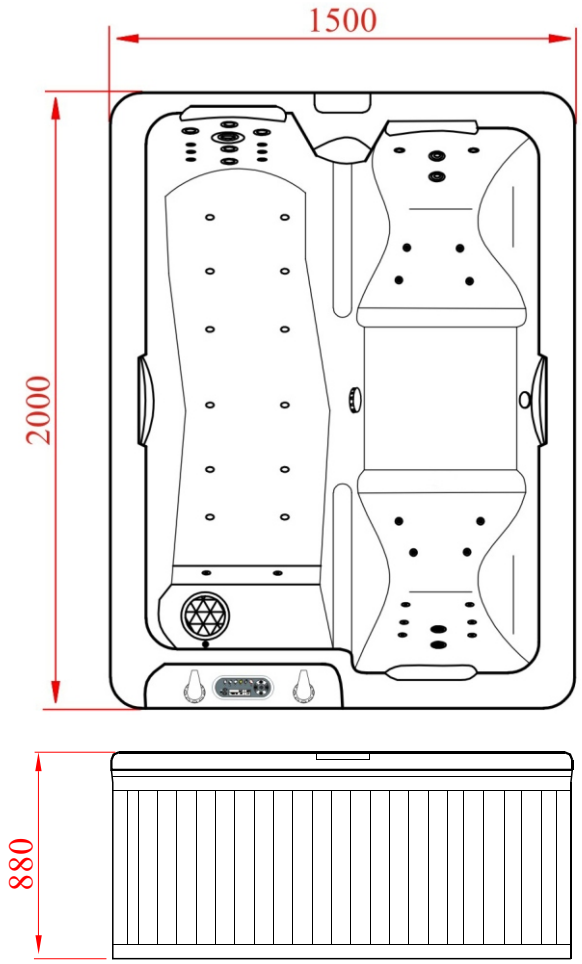
Turn the Master Switch on, all kinds of parameters show on the control panel display.

When the water achieves proper level, it shows “ON” (button 12), all the functions are available for use. While the water doesn't achieve the proper level, it shows “FF”, the whirlpool and thermostat function are not available for use until the water achieves proper level. The water temperature shows on (13) on the control panel.

The water temperature (button 13), when water temperature is 0℃ or above, it shows the relative temperature. When water temperature is below 0℃ , it indicates FF. It indicates CC, if the temperature sensor is faulty.

FM Radio information shows on (14). The preset temperature shows on (15).

A616 SPECIFICATION



1. SIZE: 2000X1500X880mm
2. Drain pipe dimension: 1. 5″
3. Weight: 230kg
4. Water capacity: 1500L
5. Seat: 2PCS
6. Bench: 1PC

SPA LOCATION AND INSTALLATION

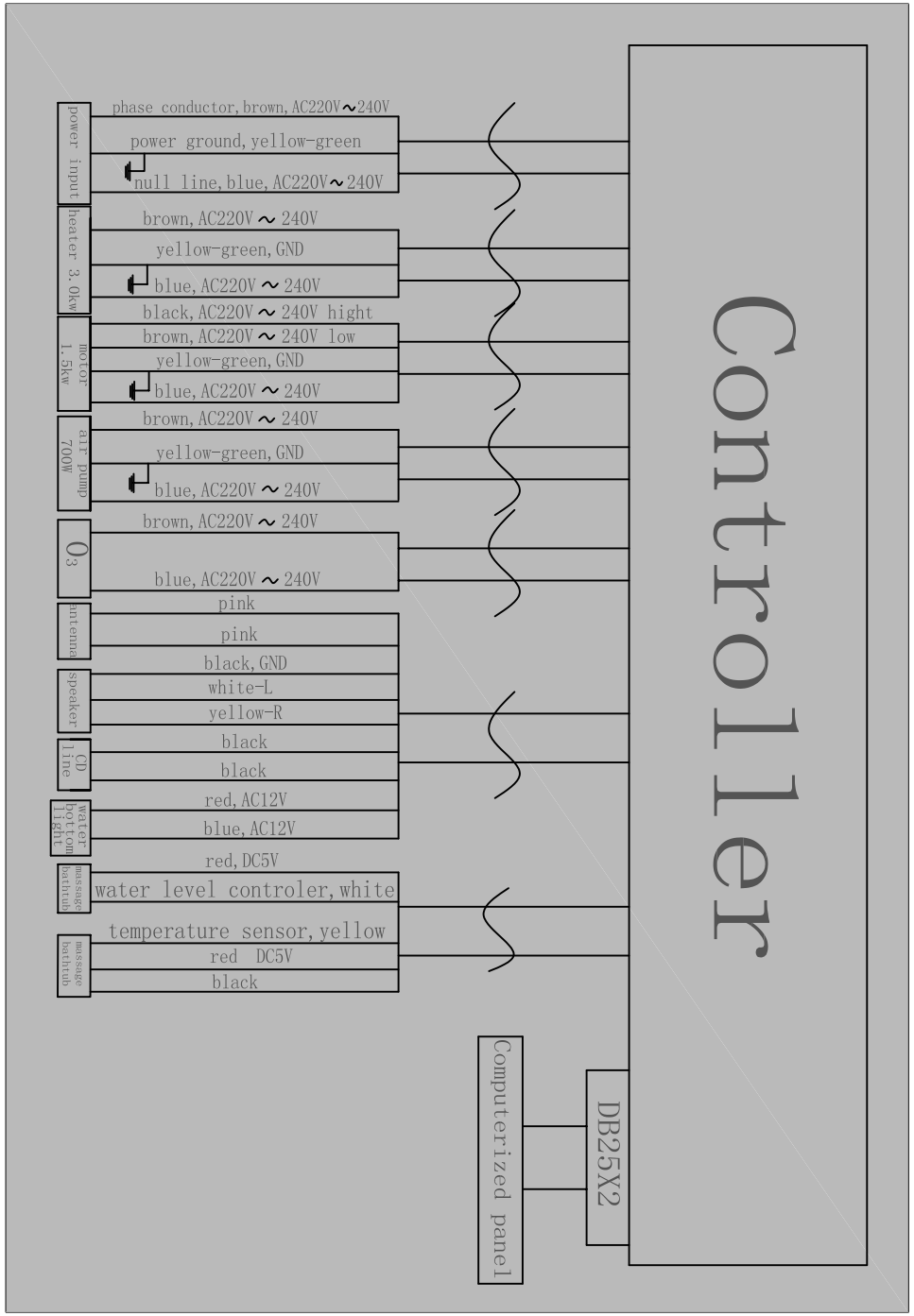
1. In order for your spa to function properly, it must be placed on a smooth, level, self-draining ground. The Equipment is installed to provide adequate drainage, and to prevent water from entering the electrical equipment area.

2.If installed the spa indoors, the floors and structures beneath the spa must be protected from run-off. If installed outdoors, you should pay attention to the ground structure to prevent the spa sliding away. The concrete ground is preferred so that rain and water overflow from the spa may flow away and not remain underneath the spa, which may cause the wood cabinet rot away over period of time.

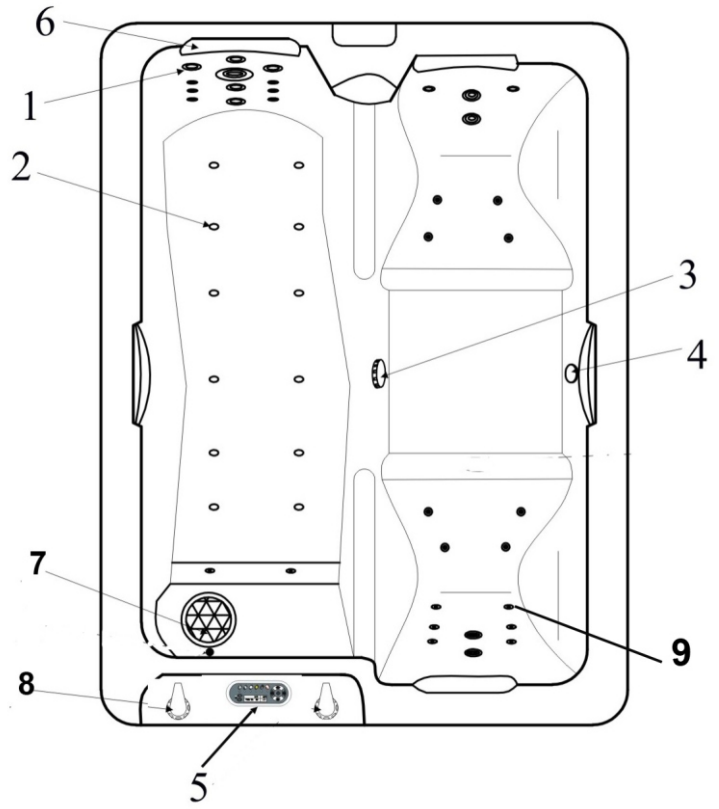
3.It is very important that an installation site must be convenient for maintenance and service for the spa. It is suggested that the spa tub must be located 1.2 meters away from the wall or other fixities.

The spa tub has been well assembled and tested before delivery. What you need to do now is to connect the power supply, water supply and drainage.

1. Connect the power supply: The junction box is installed inside the wooden skirt, you can get access to it by removing the wooden skirt. Firstly remove the screw caps with a screwdriver, then remove the skirt and open the cover of the junction box, connect the relative electrical wires accordingly (the brown is live wire, the blue is Null wire, the yellow is ground wire). Notice: The total power supply of the spa must be provided with a breaker whose power rate is 10% higher than that of spa. And it should be placed higher than 1.5 meters from the ground where is visible and easy to get access to.

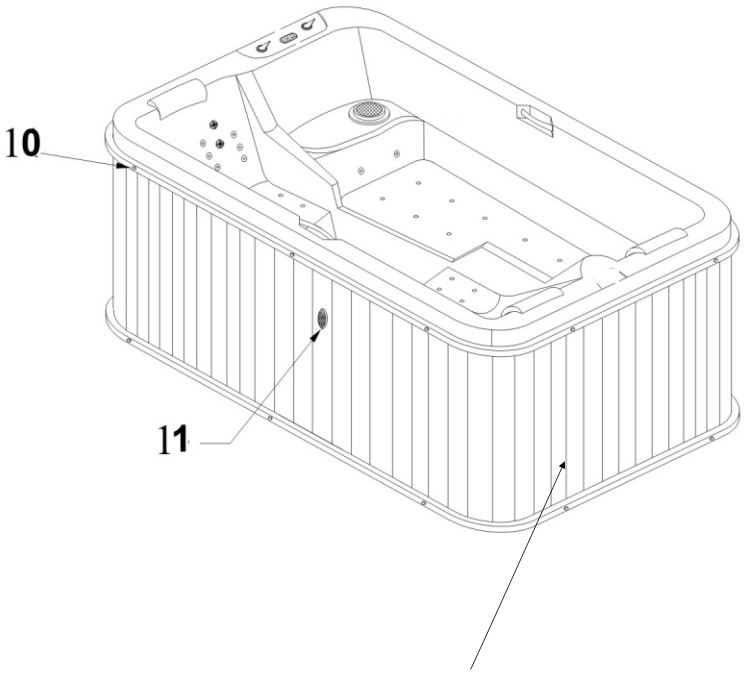


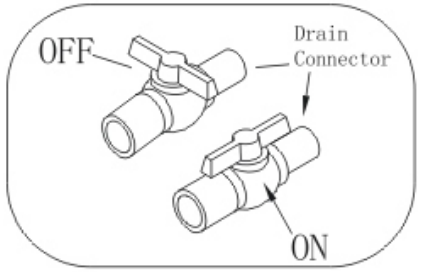
A616 FEATURES



1. **Water Jets**
2. **Air jets**
3. **Backwater**
4. **Underwater light**
5. **Controller**
6. **Pillow**
7. **Filter**
8. **Whirlpool intensity regulator**
9. **O3**

A616 FEATURES





10. Wooden skirt screws
11. Loudspeaker

NO.	Item	Description
1	Water Jets	When massage control system starts, water will outflow from the jets. Adjust them clockwise to reduce or close the outflow water, adjust counterclockwise to increase the outflow water.
2	Air jets	The air bubbles come out when the air blower running.
3	Backwater	To bring the water into the spa when water pump running.
4	Underwater light	Color changes LED light.
5	Controller	Control all the functions of spa. (Functions referring to the detailed introduction of control panel.)
6	Pillow	Rest and relax.
7	Filter	When the pump starts, water goes through the filter and then outflows from the jets.
8	Whirlpool intensity regulator	Adjust the air of whirlpool jets. Adjust it counterclockwise to increase the air, adjust clockwise to reduce or close the air.
9	O_3	The Ozonizer will generate Ozone and infuse the Ozone to Sterilize the water in the spa.
10	Wooden skirt screws	To fix the wooden skirt. Turn off the spa power when disassemble the wooden skirt. To remove the wooden skirt, firstly remove the screw cap, then remove screws.
11	Loudspeaker	To transmit the sound from TV, FM radio, DVD, CD.